PENDING CLAIMS AND STATUS THEREOF

Claims 1-3 (canceled)

4. **(currently amended):** A liquid crystal display device, ~~**as in claim 1,**~~ **comprising:**

an upper electrode;

a lower electrode;

an alignment layer in contact with said upper electrode and an alignment layer in contact with said lower electrode to form an upper assembly and a lower assembly, respectively; and

a liquid crystal material, disposed between the upper assembly and the lower assembly;

wherein the upper assembly and the lower assembly are designed relative to each other, based on at least one surface potential measurement, to create a substantially predetermined surface potential difference between the upper assembly and the lower assembly;

wherein at least one of said upper electrode and said lower electrode **[[,]]** is treated such that a surface potential difference between the lower assembly and the upper assembly ~~**, of said liquid crystal display device,**~~ is adjusted and **[[the]]** **an** intrinsic DC offset potential is changed **to be within a designed range**.

5. (original) A liquid crystal display device, as in claim 4, wherein, at least one of said upper electrode and said lower electrode is treated by firing in an atmosphere selected from the group consisting of H2, N2, and combination H2/N2.

6. (original) A liquid crystal display device, as in claim 4, wherein at least one of said upper electrode and said lower electrode is treated by etching.

7. **(currently amended):** A liquid crystal display device, ~~**as in claim 1,**~~ **comprising:**

an upper electrode;

a lower electrode;

an upper alignment layer in contact with said upper electrode and a lower alignment layer in contact with said lower electrode to form an upper assembly and a lower assembly, respectively; and

a liquid crystal material, disposed between the upper assembly and the lower assembly;

wherein the upper assembly and the lower assembly are designed relative to each other, based on at least one surface potential measurement, to create a substantially predetermined surface potential difference between the upper assembly and the lower assembly;

wherein at least one of said upper electrode and said lower electrode is treated [[,]] such that a surface potential of at least one of said upper electrode and said lower electrode is changed **so that an intrinsic DC offset potential in said liquid crystal display device is within a designed range**.

8. **(currently amended):** A liquid crystal display device, ~~**as in claim 1,**~~ **comprising:**

an upper electrode;

a lower electrode;

an upper alignment layer in contact with said upper electrode and a lower alignment layer in contact with said lower electrode to form an upper assembly and a lower assembly, respectively; and

a liquid crystal material, disposed between the upper assembly and the lower assembly;

wherein the upper assembly and the lower assembly are designed relative to each other, based on at least one surface potential measurement, to create a substantially predetermined surface potential difference between the upper assembly and the lower assembly;

wherein **a** passivation layer ~~**material**~~ is ~~**selected and**~~ disposed on at least one of said upper electrode and said lower electrode to form at least one of the lower assembly and the upper assembly wherein a surface potential of an assembly formed thereby is altered, such that a surface potential difference between the lower assembly and the upper assembly is adjusted and **[[the]]** **an** intrinsic DC offset potential in said liquid crystal display device is changed.

9. (original): A liquid crystal display device, as in claim 8, wherein the surface potential of the assembly formed thereby is altered, resulting in a decrease in the surface potential.

10. (original): A liquid crystal display device, as in claim 8, wherein the surface potential of the assembly formed thereby is altered, resulting in an increase in the surface potential.

11. **(currently amended):** A liquid crystal display device, as in claim **[[1]]** **8**, wherein a passivation layer is selected from at least one of BCB, NHC, MgO, SiO_2, AI_2O_3, SiN_2, MgF_2, and $MgAI_2O_4$ and the passivation layer is disposed on at least one of said upper electrode and said lower electrode to form an assembly, wherein the way the passivation layer is disposed is selected from at least one of sputtering by chemical vapor deposition (CVD), plasma-enhanced CVD, evaporation, spin-coating, meniscus and roller-coating; such that a surface potential difference between the assembly formed thereby and a second assembly of said liquid crystal display device **[[,]]** is adjusted.

12. (original): A liquid crystal display device, as in claim 11, wherein the passivation layer is selected and disposed on at least one of said upper electrode and said lower electrode to form the second assembly.

13. **(currently amended):** A liquid crystal display device, as in claim **[[1]]** **4**, wherein materials for said alignment layer are selected and disposed on at least one of said upper electrode and said lower electrode to form an assembly wherein a surface potential of the assembly is altered, such that a surface potential difference between the lower assembly and the upper assembly is adjusted and the intrinsic DC offset potential in said liquid crystal display device is changed.

14. (original): A liquid crystal display device, as in claim 13, wherein the surface potential of the assembly formed thereby is altered, resulting in a decrease in the surface potential.

15. (original): A liquid crystal display device, as in claim 13, wherein the surface potential of the assembly formed thereby is altered, resulting in an increase in the surface potential.

16. **(currently amended):** A liquid crystal display device, as in claim 13, wherein **[[the]]** materials selected for said alignment layer disposed on the lower assembly are different.

17. **(currently amended):** A liquid crystal display device, as in claim 13, wherein **[[the]]** materials selected for said alignment layer disposed on the upper assembly are different.

18. **(currently amended):** A liquid crystal display device, as in claim **[[1]]** **4**, wherein said alignment ~~**layer is**~~ **layers are** treated such that a surface potential difference between the lower assembly and the upper assembly ~~**, of said liquid crystal display device,**~~ is adjusted.

19. **(currently amended):** A ~~**method**~~ **liquid crystal display device**, as in claim 18, wherein **either one or both of** said alignment **[[layer]]** **layers** is treated by doping with an ionic salt, whereby the surface potential difference is changed.

Claim 20 (canceled)